

WHAT IS CLAIMED IS:

1. A method for reproducing replacement data recorded on a spare area assigned to a disc, comprising:

reading replacement data from a spare area of the disc;

storing the read replacement data;

detecting a defect area while reproducing data recorded in a data area of the disc; and

if there is a defect area detected, then reproducing at least a part of the stored replacement data corresponding to the detected defect area.

2. The method according to claim 1, wherein the disc comprises an optical disc.

3. The method according to claim 1, wherein reading the replacement data from the spare area of the disc and storing the read replacement data comprises:

searching the spare area for replacement data;

reading the searched replacement data recorded on the spare area; and

storing the read replacement data in a memory.

4. The method according to claim 1, wherein reading the replacement data from the spare area of the disc and storing the read replacement data comprises:

searching the spare area for replacement data;

reading the searched replacement data recorded on the spare area; and
storing the read replacement data in a storage device.

5. The method according to claim 1, wherein detecting a defect area is carried out, based on defect list information.

6. The method according to claim 5, wherein the defect list information is recorded in a lead-in area of the disc.

7. The method according to claim 1, wherein reading replacement data from a spare area of the disc and storing the read replacement data comprises:

identifying a predetermined position of a program requested to be played back;

reading a part of the replacement data recorded in the spare area, based on the identified predetermined position; and

storing the read replacement data part.

8. The method according to claim 7, wherein the predetermined position of the program corresponds to a start or end address of the program included in navigation data.

9. The method according to claim 8, wherein the replacement data part to be read and stored is selected by comparing the start or end address of the program with defect

area addresses respectively recorded in replacement data items included in defect list information, thereby searching for the replacement data item having the defect area address corresponding to the start or end address.

10. The method according to claim 1, wherein reading replacement data from a spare area of the disc and storing the read replacement data, comprises:

reading a part of the replacement data corresponding to the capacity of a memory when the replacement data has a size exceeding the capacity of the memory, and storing the read replacement data part.

11. The method according to claim 10, wherein reproducing at least a part of the stored replacement data corresponding to the detected defect area comprises reproducing data recorded in a data area of the disc while reproducing a part of the replacement data corresponding to the part of the replacement data currently stored in the memory.

12. The method according to claim 11, wherein the method further comprises:

reading a next part of the replacement data, recorded in the spare area;

storing the read next replacement data part in the memory; and

reproducing an un-reproduced part of the recorded data following the reproduced part of the recorded data while reproducing at least a part of the next replacement data, stored in the memory, corresponding to a defect area detected during the reproduction of the un-reproduced part of the recorded data.

13. Apparatus for reproducing replacement data recorded on a spare area assigned to a disc, comprising:

means for reading the replacement data from the spare area of the disc;

means for storing the read replacement data;

means for detecting a defect area while reproducing data recorded in a data area of the disc; and

means for reproducing, if there is a defect area detected, at least a part of the stored replacement data corresponding to the detected defect area.

14. A disc player system capable of reproducing replacement data recorded on a spare area assigned to a disc, comprising:

a memory;

a pickup head configured to read a disc, wherein the pickup head reads and stores the read replacement data in the memory;

a disc player unit configured to detect a defect area while reproducing data recorded in a data area of the disc, wherein if there is a defect area detected, then the disc player system reproduces at least a part of the stored replacement data corresponding to the detected defect area.

15. The disc player system according to claim 14, wherein the disc comprises an optical disc.

16. The disc player system according to claim 14, wherein the disc player unit is further configured to search the spare area for replacement data when the disc is loaded into the disc player, read the searched replacement data recorded on the spare area, and store the read replacement data in the memory.

17. The disc player system according to claim 14, wherein the memory comprises a storage device in a PC.

18. The disc player system according to claim 14, wherein the detection of the defect area is carried out, based on defect list information.

19. The disc player system according to claim 18, wherein the defect list information is recorded in a lead-in area of the disc.

20. The disc player system according to claim 14, wherein the disc player unit is further configured to identify a predetermined position of a program requested to be played back, read a part of the replacement data recorded in the spare area, based on the identified predetermined position, and store the read replacement data part in the memory.

21. The disc player system according to claim 20, wherein the predetermined position of the program corresponds to a start or end address of the program included in navigation data.

22. The disc player system according to claim 21, wherein the replacement data part to be read and stored is selected by comparing the start or end address of the program with defect area addresses respectively recorded in replacement data items included in defect list information, thereby searching for the replacement data item having the defect area address corresponding to the start or end address.

23. The disc player system according to claim 14, wherein the disc player unit is further configured to read a part of the replacement data corresponding to the capacity of the memory when the replacement data has a size exceeding the capacity of the memory, and store the read replacement data part.

24. The disc player system according to claim 23, wherein the disc player unit is further configured to reproduce data recorded in a data area of the disc while reproducing a part of the replacement data corresponding to the part of the replacement data currently stored in the memory.

25. The disc player system according to claim 24, wherein the disc player unit is further configured to read a next part of the replacement data, recorded in the spare area store the read next replacement data part in the memory, and reproduce an un-reproduced part of the recorded data following the reproduced part of the recorded data while reproducing at least a part of the next replacement data, stored in the memory,

corresponding to a defect area detected during the reproduction of the un-reproduced part of the recorded data.